

1 WHAT IS CLAIMED IS:

- 1 1. A method for image processing, the method comprising:
2 identifying candidate edge chains in an image being processed;
3 determining a dynamic chain-based threshold function that is dependent on at
4 least one characteristic of the image being processed;
5 applying the dynamic chain-based threshold function to the candidate edge
6 chains; and
7 removing from a set of edge chains those candidate edge chains that fail to
8 pass the dynamic chain-based threshold function.
- 1 2. The method of claim 1, wherein the at least one characteristic of the
2 image comprises a global characteristic of the image.
- 1 3. The method of claim 2, wherein the at least one characteristic of the
2 image comprises a plurality of characteristics of the image.
- 1 4. The method of claim 2, wherein the global characteristic comprises a
2 global measure of color variation that is calculated over an image.
- 1 5. The method of claim 4, wherein the global measure comprises a mean
2 measure of the color variation.
- 1 6. The method of claim 4, wherein the global measure comprises a
2 median measure of the color variation.
- 1 7. The method of claim 4, wherein the global measure is calculated over
2 the candidate edge chains within the image.
- 1 8. The method of claim 2, wherein the dynamic chain-based threshold
2 function comprises a linear function of the global characteristic.
- 1 9. An apparatus for image processing, the apparatus comprising:
2 a candidate edge chain identifier for identifying candidate edge chains in an
3 image being processed;

4 means for determining a dynamic chain-based threshold function that is
5 dependent on at least one characteristic of the image being processed; and

6 a threshold applicator for applying the dynamic chain-based threshold function
7 to the candidate edge chains.

1 10. The apparatus of claim 9, wherein the at least one characteristic of the
2 image comprises a global characteristic of the image.

1 11. The apparatus of claim 10, wherein the global characteristic comprises
2 a global measure of color variation that is calculated over an image.

1 12. The apparatus of claim 11, wherein the global measure comprises a
2 mean measure of the color variation.

1 13. The apparatus of claim 11, wherein the global measure comprises a
2 median measure of the color variation.

1 14. The apparatus of claim 11, wherein the global measure is calculated
2 over the candidate edge chains within the image.

1 15. The apparatus of claim 10, wherein the dynamic chain-based threshold
2 function comprises a linear function of the global characteristic.

1 16. The apparatus of claim 9, wherein the apparatus comprises a video
2 encoder.

1 17. The apparatus of claim 16, wherein the video encoder is configured to
2 operate cooperatively with a video decoder, and wherein the video decoder also comprises
3 the edge identifier, the means for determining, and the thresher.

1 18. The apparatus of claim 9, wherein the apparatus comprises a video
2 decoder.

1 19. A method for processing an image, the method comprises:

2 determining a dynamic chain-based threshold function that is dependent on at
3 least one global characteristic of the image being processed; and

4 applying the dynamic chain-based threshold function to a candidate edge
5 chain.

1 20. A system for image processing, the system comprising:
2 an encoder that includes a candidate edge chain identifier for identifying
3 candidate edge chains in an image being processed, means for calculating a dynamic chain-
4 based threshold function that is dependent on at least one characteristic of the image being
5 processed, and a threshold applicator for applying the dynamic chain-based threshold
6 function to the candidate edge chains; and
7 a decoder configured to operate in cooperation with the encoder, wherein the
8 decoder also includes the candidate edge chain, the means for, and the threshold applicator.